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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,538	02/12/2004	Chuang-Hua Chueh	3722-0177P	4152

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EXAMINER	
WASHINGTON, JAMARES	
ART UNIT	PAPER NUMBER
2609	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/12/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/776,538	CHUEH, CHUANG-HUA	
	Examiner	Art Unit	
	Jamares Washington	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Eric L. Andersen et al (US 6646768 B1).

Regarding claim 1, Andersen et al discloses a scan method capable of enhancing scan quality, the scan method comprising the steps of:

(a) moving one of a document and a scan module by a predetermined distance from the other ("The moving scan line is produced either by moving the document with respect to the scanner optical assembly, or by moving scanner optical assembly relative to the document" at column 1 line 48);

(b) stabilizing the movement of one of the document and the scan module and consequently making the document and the scan module relatively stationary to each other ("...each page of the document is scanned by the stationary image sensor assembly 33" at column 6 line 25);

(c) illuminating the document with light rays from a light source, and receiving a stable image signal of the document by utilizing an image sensor of the scan module ("Optical scanners operate by imaging an object...with a light source, sensing a resultant light signal with an optical sensor array..." at column 1 line 36); and

(d) terminating the receiving operation of the image sensor and shutting off the light source after the image sensor has received the stable image signal for a first predetermined period of time ("When an ADF for automatically feeding an original document through the scanner is employed, it becomes [known] the proper timing to initiate and when to terminate the actual scanning process..." at column 6 line 49).

Regarding claim 2, Andersen et al discloses the scan method as rejected in claim 1, wherein the step (a) comprises a step of:

feeding the document to generate the predetermined distance from the stationary scan module ("...moving the document with respect to the scanner assembly..." as previously rejected).

Regarding claim 3, Andersen et al discloses the scan method as rejected in claim 1, wherein the step (a) comprises a step of:

moving the scan module by the predetermined distance from the stationary document ("...moving scanner optical assembly relative to the document" as previously rejected).

Regarding claim 4, Andersen et al discloses the scan method as rejected in claim 1, wherein the light source is a light-emitting diode ("The CIS typically includes...an array of light sources, such as light emitting diodes (LEDs)..." at column 2 line 31).

Regarding claim 5, Andersen et al discloses the scan method as rejected in claim 1, further comprising the steps of:

receiving a first mode signal or a second mode signal selected by a user ("The scanner of the present invention includes a detector adapted both to detect when the automatic document feeder is opened and to detect a leading edge of an original document whenever a document page

is conveyed along the feed path..." at column 3 line 65); executing steps (a) to (d) when the first mode signal is received; and executing the following steps when the second mode signal is received:

(a1) continually illuminating the document with the light rays from the light source ("After a start button...is pushed, the carriage 31 moves under the contact glass 13 alone guide shaft 35 conveying the image sensor assembly 33 through a range defining the flatbed scanning area 41. Scanning of the original document 37 is performed while the carriage 31 is moving at a range corresponding to a size of the original document" at column 6 line 40);

(b1) moving one of the document and the scan module by the predetermined distance from the other, and receiving a standard image signal of the document by utilizing the image sensor of the scan module ("To scan a manually fed document, the image sensor assembly moves under the flatbed scanning area..." at column 3 line 52);

(c1) stabilizing the movement of one of the document and the scan module and consequently making the document and the scan module relatively stationary to each other ("...document manually positioned on the glass plate" at column 3 line 55); and

(d1) terminating the receiving operation of the image sensor after the image sensor has received the standard image signal for a second predetermined period of time ("Scanning of the original document 37 is performed while the carriage 31 is moving at a range corresponding to a size of the original document" as rejected above).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eric L. Andersen et al in combination with Kikuo Mita (US 5149977).

Regarding claim 6, Andersen et al discloses a scan method capable of enhancing scan quality, the scan method comprising the steps of:

(a) continually illuminating a document with light rays from a light source;

(b) moving one of the document and a scan module by a predetermined distance from the other;

(c) stabilizing the movement of one of the document and the scan module and consequently making the document and the scan module relatively stationary to each other, and receiving a stable image signal of the document by utilizing the image sensor of the scan module; and

(d) terminating the receiving operation of the image sensor after the image sensor has received the stable image signal for a first predetermined period of time (as rejected in claim 5 above.

However, Anderson et al fails to teach discarding an unstable image signal of the document by utilizing an image sensor of the scan module at the same time as the moving step.

Mita, in the same field of endeavor of producing high-quality scans ("...a document reader apparatus which offers good operating efficiency by making it possible to readily, reliably and efficiently detect whether the quality of the read-in image is acceptable" at column 2 line 7), teaches discarding an unstable image signal of the document by utilizing an image sensor of a scan module and rescanning the document at the same time ("If the image quality is judged to be outside the allowable limits a second switch 92 is pressed to signal this to the storage control circuit 86, the procedure moves to step 520 and the image data concerned is erased...Then, in step 522, document input is resumed" at column 6 line 55).

It would have been obvious at the time the invention was made to one of ordinary skill in the art for the scanning method of Anderson to employ discarding an unstable image signal of the document by utilizing an image sensor of the scan module at the same time as the moving step as taught by Mita to avoid outputting poor quality images from the apparatus.

Regarding claim 7, Andersen et al of the Andersen et al and Mita combination discloses the scan method as rejected in claims 6 and 2, wherein the step (b) comprises a step of:

feeding the document to generate the predetermined distance from the stationary scan module.

Regarding claim 8, Andersen et al of the Andersen et al and Mita combination discloses the scan method as rejected in claim 6 and 3, wherein the step (b) comprises a step of:

moving the scan module by the predetermined distance from the stationary document.

Regarding claim 9, Andersen et al of the Andersen et al and Mita combination discloses the scan method as rejected in claim 6, wherein the image sensor has an electronic shutter (As rejected in claim 5 above). The "exposure time" is determined by the size of the original document. Because the sensor automatically terminates capture after the document is scanned, the contact image sensor acts as an electronic shutter as opposed to a mechanical shutter which would need a mechanical means to block the passage of light for regulating the exposure time.

Regarding claim 10, Andersen et al of the Andersen et al and Mita combination discloses the scan method as rejected in claim 6 and 5, further comprising the steps of:

receiving a first mode signal or a second mode signal selected by a user; executing steps (a) to (d) when the first mode signal is received; and executing the following steps when the second mode signal is received:

(a1) continually illuminating the document with the light rays from the light source;

(b1) moving one of the document and the scan module by the predetermined distance from the other, and receiving a standard image signal of the document by utilizing the image sensor of the scan module;

(c1) stabilizing the movement of one of the document and the scan module and consequently making the document and the scan module relatively stationary to each other; and

(d1) terminating the receiving operation of the image sensor after the image sensor has received the standard image signal for a second predetermined period of time (as rejected in claim 5 and 6 above).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Junior Examiner
Art Unit 2609

03/27/07
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